

**Notice of Allowability**

Application No.

10/072,058

Examiner

Edan Orgad

Applicant(s)

NAKAMURA ET AL.

Art Unit

2684

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 2/3/05.
2. ☒ The allowed claim(s) is/are 3-12 (renumbered as claims 1-10).
3. ☒ The drawings filed on 08 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>1/13/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 3-12 (renumbered as claims 1-10) are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 3, 5, 6 and 8 (renumbered as claims 1, 3, 5 and 8, respectively), the prior art of record, specifically Nakano et al (EP 709,973) disclose a transmission power control apparatus in a base station for measuring SIR, which is a ratio of a receive signal to an interference signal, and controlling transmission power of a mobile station in such a manner that said measured SIR will agree with a target SIR, comprising: a fading detector for detecting rate of change in fading; a searcher for detecting multipath and levels of signals that arrive via respective ones of the paths (see col.7, lines 45-56); a level-difference calculation unit for calculating level differences between paths using the levels of signals; a correction unit for correcting the target SIR based upon a combination of the rate of change in fading and the level differences between paths and a difference between the measured and target value (see Nakano: col. 7, lines 45-56; Figure 8A and 8B and column 9, lines 24 - 38; col. 10, lines 39-53; Figures 13A and 13B); and means for creating a command, which controls transmission power of the mobile station in such a manner that the measured SIR will agree with said corrected target SIR, and transmitting this command to the mobile station (see Nakano: col. 7, lines 1-15 & col. 7, line 57- col. 8, line 2).

However, the prior art of record, neither alone or combination, fails to specifically disclose the plural level differences between mutually adjacent reception levels and a combination of said plural level differences between mutually adjacent reception levels at all.

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More specifically, the prior art of records alone or in combination with other cited art fails to provide motivation to specifically disclose a transmission power control apparatus in a base station for measuring SIR, which is a ratio of a received signal to an interference signal, and controlling transmission power Of a mobile station in such a manner that said measured SIR with a target SIR, comprising a fading detector for detecting rate of change in fading a searcher for detecting multipath and levels of signals that arrive via respective ones of the paths; a level-difference calculation unit for calculating plural level differences between mutually adjacent reception levels using the levels of signals, a FER measurement unit for measuring frame-error rate FER; a correction unit for correcting the target SIR based upon a combination of the rate of change in fading and said plural level differences between mutually adjacent reception levels and a difference between the measured FER and target FER; and means for creating a command, which controls transmission power of the mobile station in such a manner that the measured SIR will agree with said corrected target SIR, and transmitting this command to the mobile station.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 703-305-4223. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edan Orgad

3/31/05

  
NICK CORSARO  
PRIMARY EXAMINER